

Title (en)

DAMPING MECHANICAL OSCILLATIONS OF A WIND TURBINE

Title (de)

DÄMPFUNG MECHANISCHER SCHWINGUNGEN EINER WINDTURBINE

Title (fr)

AMORTISSEMENT DES OSCILLATIONS MÉCANIQUES D'UNE ÉOLIENNE

Publication

**EP 3318751 A1 20180509 (EN)**

Application

**EP 17190735 A 20170913**

Priority

DE 102016221864 A 20161108

Abstract (en)

It is described a method of damping mechanical oscillations of plural wind turbines (15.1, 15.2, ..., 15.n) of a wind park (13) commonly supplying electric energy to a grid (41), the method comprising: determining, for each of the plural wind turbines (15.1, 15.2, ..., 15.n), a damping control signal (21.1, 21.2, ..., 21.n) for counteracting an oscillation of the respective wind turbine; supplying at least a subset of or a subset (21.1, 21.2) of modified versions of the damping control signals to respective wind turbines (15.1, 15.2) such that a sum of the supplied damping control signals is lower than a threshold.

IPC 8 full level

**F03D 7/04** (2006.01); **F03D 7/02** (2006.01)

CPC (source: CN EP US)

**F03D 7/0224** (2013.01 - US); **F03D 7/0296** (2013.01 - CN EP US); **F03D 7/048** (2013.01 - EP US); **F03D 9/257** (2017.01 - US); **F03D 17/00** (2016.05 - US); **F16F 15/002** (2013.01 - US); **G05B 19/048** (2013.01 - US); **F05B 2260/964** (2013.01 - CN); **F05B 2270/111** (2013.01 - CN); **F05B 2270/334** (2013.01 - CN EP US); **F05B 2270/335** (2013.01 - CN); **G05B 2219/2619** (2013.01 - US); **Y02E 10/72** (2013.01 - EP US)

Citation (applicant)

WO 2016128004 A1 20160818 - VESTAS WIND SYS AS [DK]

Citation (search report)

- [X] WO 2016058610 A1 20160421 - VESTAS WIND SYS AS [DK]
- [A] WO 2015086024 A1 20150618 - VESTAS WIND SYS AS [DK]
- [A] US 2014232198 A1 20140821 - GARCIA JORGE MARTINEZ [DK], et al

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CN113565679A

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

**EP 3318751 A1 20180509**; **EP 3318751 B1 20210721**; CN 108061007 A 20180522; CN 108061007 B 20200908; DK 3318751 T3 20210830; US 10907613 B2 20210202; US 2018128243 A1 20180510

DOCDB simple family (application)

**EP 17190735 A 20170913**; CN 201711091524 A 20171108; DK 17190735 T 20170913; US 201715784436 A 20171016